

**B.Sc. IN MEDICAL LABORATORY TECHNOLOGY
(BSCMLT)**

Term-End Examination

June, 2014

BAHI-005 : CLINICAL BIOCHEMISTRY

Time : 3 Hours

Maximum Marks : 70

PART - A

1. Complete the following : **2x10=20**

- (a) _____ is a reducing monosaccharide.
- (b) Serum should be separated from red cells as soon as possible to prevent leakage _____ .
- (c) The first step in the catabolism of triacylglycerol is _____ .
- (d) The most abundant of the bile acid is _____ .
- (e) Both DNA and RNA are polymeres of _____ .
- (f) _____ increases the renal clearance of phosphate and decreases the concentration of plasma phosphate.
- (g) The normal values for calcium concentration in serum or plasma is _____ .
- (h) The enzyme requires for ketone body formation is located in the _____ .

- (i) An elevation of blood urea usually signifies decreased glomular filtration function is referred to as _____ .
- (j) The end product of glucose oxidation by glycolysis is _____ .

PART - B

Answer **any three** questions each carries **10** marks.

2.
 - (a) Describe carbohydrate metabolism in the body. 4
 - (b) What is the confirmatory test for the diagnosis of diabetes mellitus ? 4
 - (c) Give sample values of this test in the following : 2
 - (i) Normal person.
 - (ii) Diabetes mellitus.
3.
 - (a) Define lipids. 2
 - (b) Describe lipid metabolism. 6
 - (c) Sample value for serum cholesterol in the following condition : 2
 - (i) Nephrotic syndrome.
 - (ii) Hyperthyroidism.
4.
 - (a) Structure and functions of nucleic acid. 5
 - (b) Write the principle and procedure for the estimation of uric acid. 5
5.
 - (a) List four non - functional enzymes found in the blood. 2
 - (b) What are the factors influencing enzyme activity. 6
 - (c) Functions of co - enzyme. 2

6. (a) Describe the principle of Flame photometry. 4
(b) List 4 electrolytes that can be measured by this instrument 2
(c) Describe the procedure of any one of the test. 4

PART - C

7. Write short notes on **any four** of the following :
(each carries 5 marks) 5×4=20
(a) Lipo proteins.
(b) TCA cycle / Kreb's cycle)
(c) Importance of phosphorus.
(d) Creatinine clearance test.
(e) Serum alkaline phosphatase.
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